

October 1, 1951.

Dr. B. D. Davis,
411 E. 69 Street,
New York 21, N.Y.

Dear Bernie:

Thanks for the detailed information on the mutants we sent you. I don't know why we haven't thought before to change our Group 3 AA mixture to include pab (i.e., as in Table 3 of the Methods in Med Res.), since this trouble always comes up with these mutants. I dare say we have noticed a pab-requirement; at least some of the mutants do not grow very well in our hands on the triple supplement, but our criterion has been the least supplement that would give moderate growth.

I should have mentioned also that many of the cultures had been isolated and characterized by relatively inexperienced assistants, and never checked. How a tyrosine-prolineless mixture got in here is hard to understand, unless, of course, the original stock slant was inoculated twice. I am inclined to be somewhat suspicious of W-1427, and wonder if the mixture could not be a secondary result of further mutation. Have you noticed any such ~~mix~~ discrepancies in your material.

PF-4 is a peculiar strain, which has behaved very inconsistently in my hands. At one time I thought it might be cross-fed, via the atmosphere of the incubator, by volatile indole, of which Pseudomonas is a prolific producer. At any rate, tests in liquid medium seemed somewhat more consistent than on agar plates. By the bye, Esther is puzzling over a K-12 mutant that fails to grow on nutrient agar, but grows well on nutrient broth (less agar), or on EMB agar. Have you ever had such a beast?

I don't recall which version of our replica plating paper was sent to Aaron; at any rate, as finally written up (for J. Bact. a few months hence) no attempt was made to collect an exhaustive bibliography on adaptive mechanisms. I did send an ms. copy to Eagle, however.

This arrangement of our sending you our difficult auxotroph mutants pleases me very much, as it removes the great temptation to spend a lot of time on the mutant characters--- which you can obviously do better. Do you mind if we send you monstrosities other than aromaticless? I do hope you do something with PF-11 sometime.

Webb has probably sent out a circular already; if not: the reprint book is out (3.75, unfortunately). I would greatly appreciate collecting back reprints of my Genetics 1947 paper from people who find them surplus owing to purchase off the back. My supply had gone down to zero.

Sincerely,

J. Lederberg